

WHAT IS CLAIMED IS:

1. A transponder circuit comprising an input signal section coupled to both a first and a second comparator.

2. The circuit of Claim 1, wherein said first comparator consumes less power than said second comparator.

3. The circuit of Claim 1, wherein said second comparator operates at a higher speed than said first comparator.

4. The circuit of Claim 1, wherein said second comparator is only enabled when a predefined signal is detected at said first comparator.

5. The circuit of Claim 1, wherein a reference voltage for said first comparator is adjustable during circuit operation.

6. The circuit of Claim 1, wherein a reference voltage for said second comparator is adjustable during circuit operation.

7. The circuit of Claim 1, further comprising validation circuitry configured to validate said input signal in response to a signal from said first comparator.

8. The circuit of Claim 7, wherein said second comparator is only active when said validation circuitry validates said input signal.

9. The circuit of Claim 1, wherein valid receive signal processing is only performed on a signal produced by said second comparator.

10. The circuit of Claim 1, wherein said second comparator turns off when a voltage level of said input signal is below a voltage level of a reference voltage signal received at said second comparator.

11. A method of reducing power consumption in a transponder circuit, comprising activating a first comparator prior to receiving a predefined signal, and activating a second comparator in response to an output from said first comparator.

12. The method of Claim 11, wherein said first comparator consumes less power than said second comparator.

13. The method of Claim 11, wherein said second comparator operates at a higher speed than said first comparator.

14. The method of Claim 11, further comprising performing transponder signal processing only on a signal produced by said second comparator.

15. A method of operating a transponder circuit, comprising routing an input signal to a first comparator which is enabled and a second comparator which is disabled, and enabling said second comparator in response to a signal output by said first comparator.

16. The method of Claim 15, further comprising operating said second comparator only after a predefined signal received at said first comparator has been validated.

17. The method of Claim 15, wherein said first comparator consumes less power than said second comparator.

18. The method of Claim 15, wherein a reference voltage for said first comparator is equal to a reference voltage for said second comparator.

19. The method of Claim 15, further comprising performing transponder receive signal processing only on a signal received by said second comparator.

20. The method of Claim 15, further comprising activating an oscillator upon detection of a signal at said first comparator, driving a signal validation circuit with a signal from said oscillator, validating said predefined signal from said first comparator at said validation circuit, and activating additional transponder circuit components following signal validation.

21. The method of Claim 15, further comprising adjusting a reference voltage for said first comparator and a reference voltage for said second comparator in response to information received from said input signal.

22. A transponder circuit, comprising:

an input terminal;

a first comparator, coupled to said input terminal;

a second comparator, coupled to said input terminal;

control circuitry, coupled to said first comparator and said second comparator, configured to control the operation of said second comparator by determining a validity status of a signal received from said first comparator.

23. The circuit of Claim 21, wherein said first comparator consumes less power than said second comparator.

24. The circuit of Claim 21, wherein said second comparator operates at a higher speed than said first comparator.

25. A method of making a transponder circuit, comprising coupling an antenna to two separate comparators.

26. The method of Claim 25, wherein one of said two separate comparators consumes less power than the other.

27. The method of Claim 26, further comprising coupling an enable input of one of said comparators to a controller in the transponder circuit.